

Generated by: Java Viewer

```
import java.util.ArrayList;
import java.util.List;
import java.util.Scanner;
import java.util.InputMismatchException;

class Question {
    private String questionText;
    private String[] options;
    private int correctAnswerIndex;

    public Question(String questionText, String[] options, int correctAnswerIndex) {
        this.questionText = questionText;
        this.options = options;
        this.correctAnswerIndex = correctAnswerIndex;
    }

    public String getQuestionText() {
        return questionText;
    }

    public String[] getOptions() {
        return options;
    }

    public boolean isCorrectAnswer(int userChoice) {
        return userChoice == correctAnswerIndex;
    }

    public int getCorrectAnswerIndex() {
        return correctAnswerIndex;
    }
}

class Quiz {
    private List<Question> questions;
    int input;

    public Quiz(List<Question> questions) {
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this.questions = questions;
}

public void startQuiz() {
int score = 0;

for (Question question : questions) {
System.out.println(question.getQuestionText());

for (int i = 0; i < question.getOptions().length; i++) {
System.out.println((i + 1) + ". " + question.getOptions()[i]);
}
int userChoice = getValidInput(1, question.getOptions().length);

if (question.isCorrectAnswer(userChoice )) {
System.out.println("Correct!");
score++;
} else {
System.out.println("Incorrect. The correct answer is " + (question.getCorrectAnswerIndex() ));
}
}
System.out.println("Your score is: " + score + "/" + questions.size());
}

private int getValidInput(int min, int max) {
Scanner scanner = new Scanner(System.in);

do {
System.out.print("Enter your choice: ");
try {
input = scanner.nextInt();
if(input < min || input > max) {
throw new InputMismatchException();
}
} catch (InputMismatchException e) {
System.out.println("Invalid input. Please enter a number between " + min + " and " + max);
scanner.nextLine();
}
} while(input < min || input > max);
return input;
}

```

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}
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public class Main {  
    public static void main(String[] args) {  
        List<Question> questions = new ArrayList<>();  
  
        questions.add(new Question("Which is not an OOP language?", new String[]{"Java", "Python",  
"C++", "C"}, 3));  
        questions.add(new Question("What is the capital of France?", new String[]{"London",  
"Berlin", "Paris", "Rome"}, 2));  
        questions.add(new Question("What is the largest planet in our solar system?", new  
String[]{"Jupiter", "Earth", "Mars", "Venus"}, 0));  
        questions.add(new Question("What is the chemical symbol for water?", new  
String[]{"CO2", "H2O", "O2", "N2"}, 1));  
  
        Quiz quiz = new Quiz(questions);  
        quiz.startQuiz();  
    }  
}
```